



Bulletin

Vol. 25, No. 39

September 30, 1970

CANADA CONTRIBUTES TO INTERNATIONAL FORESTRY

Canadian involvement in the work of international organizations and programs concerned with forestry continues to increase, according to the Department of Fisheries and Forestry. Although the Special Adviser and the International Liaison Officer are primarily concerned with this activity, the contribution of the Forestry Branch involves many officers and includes a wide range of disciplines and specialized activities.

In September 1968, Canada was host to formal meetings of the thirteenth session of the International Poplar Commission, an important event in international forestry, participated in by 15 countries. Canada's representatives were drawn from the Forestry Branch, other federal departments, provincial departments responsible for forestry, and the forest industries.

The Ad Hoc Forestry Committee of the United Nations Food and Agriculture Organization (FAO),

set up to consider the proposed upgrading of the FAO Forestry and Forest Industries Division to departmental status, met in Rome in March 1969. The committee discussed the Director-General's proposals for strengthening forestry and the suggested work program for 1970-71. The Deputy Minister of the Department of Fisheries and Forestry chaired the meeting and two of the three remaining Canadian participants came from the Forestry Branch.

Several subsidiary bodies of the North American Forestry Commission of FAO, of which Mexico, the United States and Canada are members, held meetings during the year. The Committee of Alternates and the Study Group on Forest Engineering, both established as a result of recommendations of the fourth session of the Commission, met in Washington. The Study Group on Forest Engineering, the Forest Insects and Diseases Working Party, and the Forest-Fire-Control Working Party also met in Mexico during 1968-69.

CONTENTS

Canada Contributes to International Forestry	1
Socking it to the Soilers	2
Earthquake Conference	2
Canada's Success at Osaka	3
Computers Help Build Roads	4
Diplomatic Post for Defence Minister	5
Delegation to the UN	5
Canada-Cameroun Agreement	5
Stamp Program 1971	5
Canadian Scientist Honoured	6
Grants to Top Athletes	6
Stratford Seeks New Audiences	6
Canadian Pacific Railway Finances	6
Monthly Index	7

WORLD CONFERENCE IN VANCOUVER

In March 1969, Canada agreed to accept FAO's invitation to act as host to a World Consultation on Wood in Structures and Housing planned for 1971 in Vancouver. The major object of the two-week consultation is to improve the use of wood in housing and structures with special emphasis on low-cost housing.

Canadian participation in the activities of FAO also includes the chairmanship of the Advisory Committees on Pulp and Paper, and Forestry Education. The Forest Management Institute, in co-operation with FAO, took part in trials in Guatemala of a radar altimeter developed by the National Research Council for use in low-level photography for forest surveys.

Canada continued to play an active role in the program of the International Union of Forestry Research Organizations (IUFRO). In Czechoslovakia, an official of the Forestry Branch attended meetings of the Permanent and Enlarged Committees as well as the Organizing Committee, which was established to

review the internal structure of IUFRO. A member of the Forestry Branch also participates in the program of the Working Party on Forest-Fire Control, and several other officers take part in IUFRO activities in their fields of specialization. Canada is contributing to the cost of both the English and French versions of the Multilingual Forestry Terminology which is being prepared under the auspices of the Joint FAO/IUFRO Committee on Bibliography and Terminology.

ROLE IN DEVELOPING COUNTRIES

The Forestry Branch acts as a consultant to the Canadian International Development Agency (CIDA) on matters of forestry assistance to developing countries. During the year, it completed reviews of earlier forest surveys made in Ceylon, Pakistan, Dominica, Nigeria and Malaya for the use of FAO and CIDA. A member of the Forestry Branch is working on a resource survey and inventory crew training program in Laos. Assistance is also being provided to CIDA in placing forestry students in Canadian universities and ranger schools and in arranging practical summer training with Forestry Branch establishments.

The Department continued to provide financial support for the Commonwealth Forestry Institute and maintained its liaison with the Commonwealth Forestry Bureau and the Commonwealth Institute of Biological Control.

Representatives of the Forestry Branch also attended several international meetings, including the International Congress of Entomology in Moscow and the International Congress for Photogrammetry in Lausanne, Switzerland. A number of officers participated in the activities of the Economic Commission for Europe (Timber Committee) through the preparation of papers. Eight Canadians, interested in protecting forests from fire, insects, and diseases, took advantage of a reciprocal arrangement to make a return visit to the U.S.S.R. Four members of this delegation were from the Forestry Branch.

SOCKING IT TO THE SOILERS

The Minister of Transport, Mr. Don Jamieson, stated recently that the Government would take immediate action to prevent the pollution of Canadian waters by ships passing through them. He said that the polluter should be held fully responsible for clean-up and compensation — the Government intended to ensure that Canada and Canadians were "protected to the highest practical degree from pollution caused by shipping".

Mr. Jamieson outlined the following areas where action would be taken:

- Implementation of standards and regulations for the operation of unmanned craft.
- Stiffer pilotage regulations.
- The prevention of ships entering or moving anywhere within Canadian waters, including the estab-

lishment of pollution zones, unless they are suitably constructed, equipped, maintained and manned.

- The limiting of the quantity of pollutants that may be carried in a ship or in any one compartment of a ship.
- The immediate reporting of accidents or incidents that could cause pollution.
- The requirement that ships carrying pollutants, which are not calling at Canadian ports, stay outside Canadian pollution and fishing zones.
- The implementation of stiffer penalties for the wilful or negligent discharge of pollutants from ships.
- The inspection of ships before they enter Canadian waters to ensure that they meet Canadian standards.

Mr. Jamieson further stated:

"Through frightening experiences such as the sinking of the *Arrow* and the *Irving Whale*, we have learned much and continue to gain experience in the field of pollution of the sea by oil. From this experience we are developing equipment, methods and procedures which will minimize the effect of this type of pollution because we know that whatever preventive measures are taken, they will not be 100 percent effective. To this end we are also establishing contingency procedures to mobilize effectively and immediately as in the case of "operation oil" the resources necessary to cope with incidents which may occur despite the extremely rigorous preventative measures contemplated.

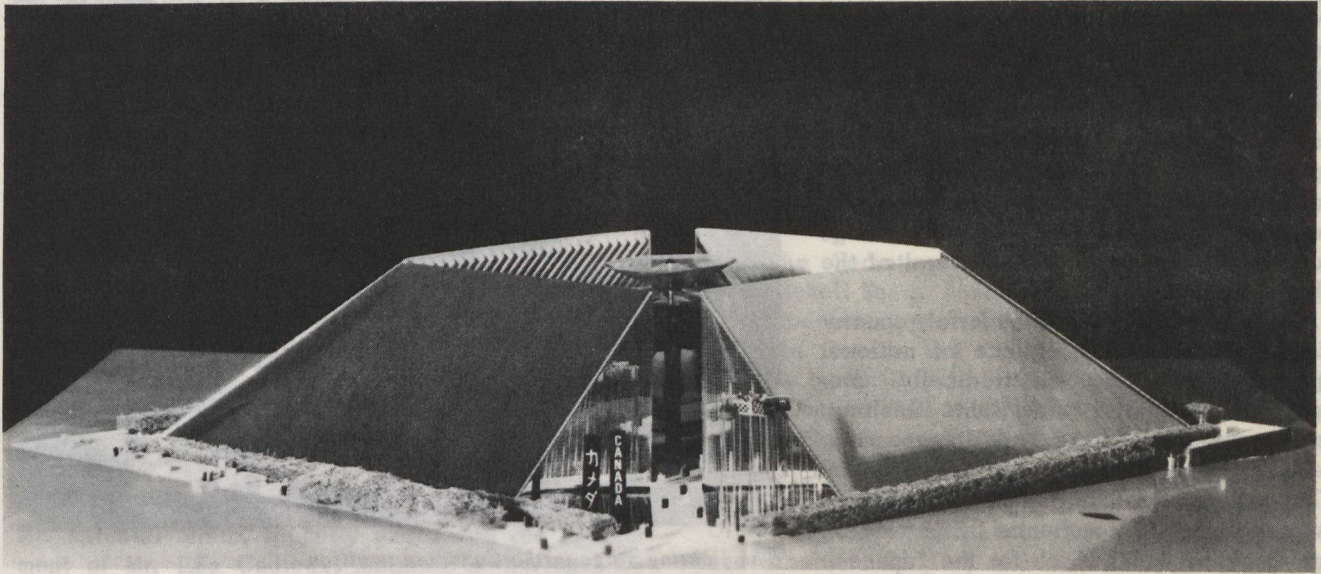
"Finally we are examining the problem of meeting the costs and I will be proposing a formula which will take into account responsibility for clean-up as well as the effect that this may have on those who have legitimate claims because their livelihood has been jeopardized."

EARTHQUAKE CONFERENCE

The Canadian National Committee for Earthquake Engineering (CANCEE) of the National Research Council of Canada, in co-operation with the Civil Engineering Department of the University of British Columbia, will sponsor a Conference on Earthquake Engineering Research from May 25 to 26, 1971, at the University of British Columbia in Vancouver.

The Conference, the first such meeting to be held in Canada, is being arranged primarily for those interested in earthquake engineering research. Its aims are to promote national co-operation among engineers and scientists in the area of earthquake engineering through the interchange of knowledge, ideas and results of research, to acquaint Canadian researchers of the national effort in this field, and to co-ordinate and stimulate future research programs. To accomplish these aims, papers will be read on current research topics, informal group discussions will be held on specialized areas of research and tentative plans for the future will be outlined.

CANADA'S SUCCESS AT OSAKA



The exterior of the Canadian pavilion was sheathed in mirrors.

On September 4, nine days before the closing of Expo 70, Canada's national pavilion and its designers, Erickson/Massey, received special awards from the Architectural Institute of Japan for "excellence of exhibition integration and architecture". Special mention was made of use of structural wood in the courtyard of the pavilion.

Czechoslovakia's pavilion was awarded second place and Switzerland's, third.

Canada, as a participant nation, was also given an award. In accepting it, the Canadian Commissioner-General, Mr. Patrick Reid, said that his country's purpose in taking part in the 1970 world exhibition had been to implant in the next generation of the Japanese people "a regard and appreciation for Canada, its people and things Canadian". And this aim had been achieved, he declared. Over 25 million people had visited the Canadian pavilion, the highest number to enter any of the pavilions during the six-month run of the 1970 world fair. Canada's pavilion had the additional honour of being the only foreign pavilion visited by Emperor Hirohito when he opened Expo 70 on March 14.

In May, the Canadian pavilion received a Special Triangle Award from the National Society of Interior Designers of the U.S.A.

The architects Arthur Erickson and Paul Massey have been partners since 1963, when they won their first prize in the Simon Fraser University architectural competition. Among other awards are five Massey Medals, the Best Design of Pavilion in the Tokyo International Trade Fair in 1965, the Prestressed Concrete Institute Award in 1966 and 67 and the Vancouver Citation Award in 1965 and 66.

CANADAY ON CANADA

In an article in *The New York Times* on April 5, the art critic John Canaday describes the pavilion of



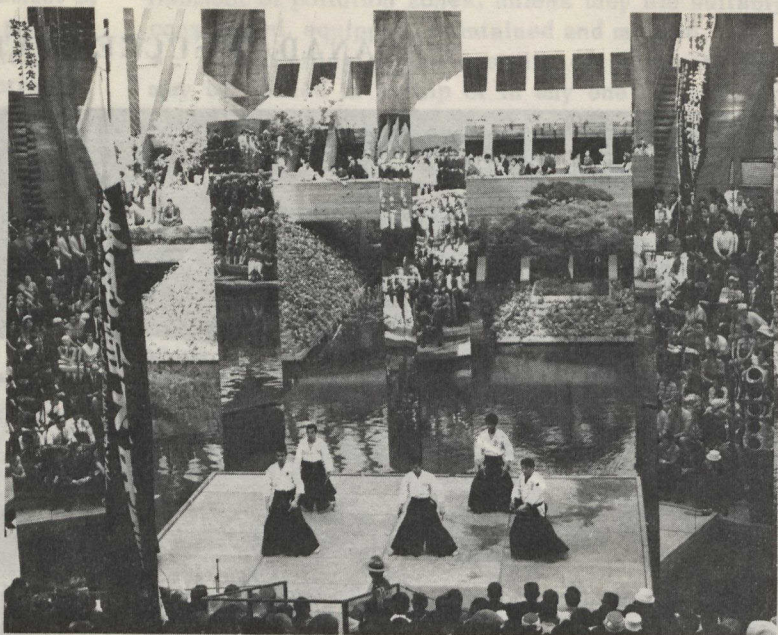
One of the entrances to the courtyard.

Canada in the following words:

"Far and away the most successful of the national pavilions as a convincing portrait of a wonderful land inhabited by a wonderful people, is Canada's. Its spectacular sloping mirrored walls, designed by the Vancouver firm of Erickson/Massey, form a hollow truncated pyramid around an open courtyard where open-air performances of Canadian folk dances and the like are held on a platform surrounded by a pool. From this area you go underground, as you do in several of the big pavilions.

"There you see a wonderful, country in an absolute masterpiece of national presentation. An electronically programmed featurette with lights flashing, mannequins appearing and disappearing, and a dozen lively tricks is emceed by Teizo Muta, a sort of Japanese Bob Hope, who delights his audience by putting on an Osaka accent, which for the Japanese has connotations similar to those that Brooklynese has for Americans. Then you move to the first amphitheater, where the serious program begins.

"Until last week I had never really thought of Canada as a marvellous country. Admirable and all that, but a bit dull. I don't feel that way any more. For perhaps 20 minutes which I wished would not end, scenes of Canadian wilderness, from plains and forests to deserts I didn't know existed and frozen seas of planetary dimensions, were projected on an enormous triangular screen to a score that I can only describe as musical but non-melodic and frequently onomatopoeic. There were wild animals but no human beings at all, and no cities. The images dealt with only the first part of the pavilion's theme, "The



The floating stage in the Canadian pavilion

Vastness of Our Land..." and I was truly moved."...

"The Canadian pavilion theme, which is 'Discovery,' is amplified in the theme sentence, 'The vastness of our country, the diversity of our people, and the dynamics of change involve us constantly in discovery'; and I must say that for this member of an *effete culture* that somehow managed to land men on the moon, the Canadian pavilion was a discovery indeed."

(See also CWB, Vol. 25, No. 23, P. 3, dated June 10, 1970, No. 15, P. 3, dated April 15, No. 13, P. 6, dated April 1, Vol. 24, No. 46, P. 5, dated November 12, 1969, No. 24, P. 4, dated June 11 and No. 17, P. 3, dated April 23.)

COMPUTERS HELP BUILD ROADS

A combination of computer systems and aerial photo mapping is helping engineers of the federal Department of Public Works to design and build roads in national parks and throughout the North at lower engineering costs and in less time than under conventional methods.

The fact that modern computers perform at high speed the many detailed and intricate calculations involved in laying out a road and determining the volumes of earth and rock to be moved, has been recognized for a number of years. Now, Canadian engineers are taking the process into the realm of decision-making and are putting the computer to work to develop new systems of road layout.

Public Works has entered into a contract with Spartan Air Services Limited to produce "orthophoto-

graphic maps", which are reproduced from aerial photographs, corrected to true scale with normal photographic distortion eliminated and with accurate contour lines applied.

The next step is to transfer information from the contour-lines on the map into a computer, by using an electronic "digitizer". From the figures fed into the computer by the digitizer, comes information which will allow engineers to make a quick selection of the best route from many alternatives along the general path shown on the aerial map.

In operation, a survey map is placed on the digitizer table, a metallic finger is depressed to touch a contour line and, at the same time, the figure for the elevation shown by the particular contour line is recorded on a card by a key-punch. The finger is then moved to the next contour line and the process repeated from one contour line to the next

in a straight line right across the map.

The operator then goes back and starts a new line parallel to and at a prescribed distance from the previous one.

The result is a series of numerals from which can be read the cross-section of the land area under study along any desired line. Given the desired elevation of the road and its position, the computer can calculate how much soil will have to be moved.

OBSTACLES POINTED OUT

The orthophotographic map also makes it immediately apparent whether or not there are obstacles to a chosen route, such as muskeg, heavy forest, rock, or streams, and the engineer is able to examine the problems involved without the need for extensive ground surveys.

DIPLOMATIC POST FOR DEFENCE MINISTER

The Secretary of State for External Affairs, Mr. Mitchell Sharp, recently announced the appointment of Mr. Léo Cadieux, Minister of National Defense, as Canada's Ambassador to France, replacing Mr. Paul A. Beaulieu.

Mr. Beaulieu, will become Ambassador to Portugal, replacing Mr. Michel Gauvin, who will become Ambassador to Greece. The former Ambassador to Greece, Mr. H.F. Feaver, left Athens in June and will be retiring from the Department in November.

DELEGATION TO THE UN

The Canadian delegation to the twenty-fifth session of the United Nations General Assembly, which opened in New York on September 15, is under the chairmanship of the Secretary of State for External Affairs, Mr. Mitchell Sharp, and comprises the following members:

Mr. Yvon Beaulne,

Permanent Representative of Canada to the United Nations, vice-chairman of the delegation

Mr. Jean-Pierre Goyer,

Parliamentary Secretary to the Secretary of State for External Affairs

Mr. Gordon Blair, M.P.,

Chairman, House of Commons Standing Committee on Procedure and Organization

Miss Renaude Lapointe,

Information Officer, Department of Indian Affairs and Northern Development

Mr. Hugh L. Keenleyside,

Victoria, British Columbia

Mr. George Ignatieff,

Ambassador and Permanent Representative of Canada to the Office of the United Nations and to other International Organizations at Geneva

Mr. M.H. Wershof,

Ambassador of Canada to Denmark

Mr. Bruce Rankin,

Consul-General of Canada in New York

Mr. André Bissonnette,

Legal Adviser to the Department of External Affairs and Assistant Under-Secretary of State for External Affairs

Dean R. St. J. Macdonald, Faculty of Law, University of Toronto and Mr. Robert R. Kaplan, M.P., are special advisers.

CANADA-CAMEROUN AGREEMENT

The Secretary of State for External Affairs, Mr. Mitchell Sharp, announced recently that an agreement concerning economic and technical co-operation between Canada and Cameroun had been signed in Toronto by Mr. Donald S. Macdonald, President of the Privy Council, and Mr. Charles Onana Awana, Minister of Planning and Territorial Development of the Federal Republic of Cameroun. The agreement is based on the memorandum of understanding signed in Ottawa on September 10 by Prime Minister Trudeau and President El Hadj Ahmadou Ahidjo of Cameroun, who, accompanied by his wife, made a state visit to Canada from September 9-16.

The conclusion of the agreement marks a particularly significant step in the relations between Canada and Cameroun in the field of developmental assistance. The agreement establishes the conditions that will apply to co-operative programs and development projects to be carried out by the two countries.

STAMP PROGRAM 1971

Postmaster-General Eric Kierans recently outlined Canada's stamp program for 1971.

One of Canada's major contributions to the welfare of mankind will be recalled by a stamp in honour of the fiftieth anniversary of the discovery of insulin.

The centennial of British Columbia's entry into Confederation as Canada's sixth province will be given recognition in a special issue. Another will mark the two-hundredth anniversary of the completion of one of Samuel Hearne's epic overland journeys of exploration.

Emily Carr, painter and writer, a native of British Columbia, will become one of the few women commemorated on Canadian stamps, a century after her birth. Another painter to be honoured is Paul Kane, who made an impressive pictorial record of life among the Indians of Canada.

Louis-Joseph Papineau, a famed fighter for reform in Lower Canada, will receive recognition during the year in which the hundredth anniversary of his death occurs. A commemorative issue will mark the hundredth anniversary of the birth of Sir Ernest Rutherford, whose work at McGill University made it a world centre of research in atomic physics.

One contemporary event scheduled for recognition, under the theme title of "One Hundred Years of Measured Progress", will be the centennial of national census-taking in Canada.

"Speaking to the World" will be the title of a stamp depicting international co-operation, issued to mark the opening of new transmitter facilities by the International Service of the Canadian Broadcasting Corporation.

Designed to illustrate the beauty of Canada's national emblem will be a special set of non-commemorative stamps under the title of "Maple in Four Seasons".

The customary Christmas issues will again be available late in the year.

CANADIAN SCIENTIST HONOURED

Dr. Gerhard Herzberg of the National Research Council of Canada has become the first Canadian to receive the senior award of the Chemical Society of London, an award founded in 1867 to commemorate the name of Michael Faraday, probably the most distinguished scientist of the nineteenth century.

Dr. Herzberg has been invited to be the Faraday Medallist and Lecturer of the Society for the 1970-71 session.

Dr. Herzberg delivers his lecture on September 30 at the autumn meeting of the Society in London. The Faraday Lecture is usually delivered every three years.

Twenty-five scientists, including 17 Nobel Prize winners, have received the award since it was founded.

Dr. Herzberg, a founder of the science of molecular spectroscopy, retired from the Council last year. Shortly before his retirement he was named a Distinguished Research Scientist with the Council to enable him to continue his research.

GRANTS TO TOP ATHLETES

Mr. John Munro, Minister of National Health and Welfare, has announced that 37 outstanding Canadian athletes have been awarded educational grants-in-aid.

The \$2,000 awards are intended to help athletes who, because of long training and competitive schedules, have little opportunity to raise funds for educational purposes. They are renewable for up to four years, providing athletes continue post-secondary educational programs as well as their training and competition.

The Minister noted that these awards implemented another of the recommendations of the Task Force on Sports for Canadians. Other recommendations on which action has resulted include the establishment of Hockey Canada, the National Sports Adminis-

trative Centre in Ottawa, and the Canadian Academy of Sports Medicine.

Over 300 applications were considered by a national selection committee headed by Dean Ivor Wynne of McMaster University and which included representatives of the Canadian Association of University Athletic Directors, Canadian Intercollegiate Athletic Union, Canadian Amateur Sports Federation, Canadian Association for Health, Physical Education and Recreation and the Canadian Federation of Provincial School Athletic Associations.

STRATFORD SEEKS NEW AUDIENCES

A new position, Director of Audience Development, aimed at increasing the potential theatre audience, has been created at the Stratford Festival, General Manager, William Wylie announced recently.

Mr. Martin Wiener, the incumbent, will work in an area that has become increasingly important to all the performing arts. To encourage a responsive audience, theatres in North America must go beyond the regular theatre-supporter to become more closely involved with the community. It will, therefore, be the new Director's job to investigate and establish communications with markets that have not been traditional supporters of the arts.

"The Festival already does a fairly massive job of reaching its total market," Mr. Wylie said, "but this is an attempt to reach specific groups rather than the general theatre-going public."

Mr. Wiener, a member of the Festival's Publicity Department, began his career in amateur theatre in Winnipeg, studying with John Hirsch and Tom Hendry. He was associate producer of the Studio Lab Theatre in Toronto, before leaving to join the Stratford Festival as a publicity assistant 17 months ago.

CANADIAN PACIFIC RAILWAY FINANCES

Rail revenues of Canadian Pacific rose in 1969 by \$24.2 million, to a record \$639.7 million. However, rail expenses jumped by \$30.8 million to \$602.1 million, resulting in a decrease in net rail operating income to \$37.6 million from \$44.2 million in 1968. After income from other operations and investments had been added and fixed charges had been deducted, net income was \$53.3 million, down from \$61.3 million in 1968.

Growth in net revenues since 1923, has not kept pace with increases in gross revenues. Gross figures tripled from \$212 million in 1923, while net income rose 55 per cent from \$34.4 million in 1923.

Revenue freight ton-miles were 36.2 billion in 1969, up from 34.6 billion in 1968 and 14.6 billion in 1923. Passenger-miles, however, dropped again to 5,076,000 from 5,288,000 in 1968 and 16,224,000 in 1923.

MONTHLY INDEX

(September 1970, Volume 25)

- Agriculture (*see also* Industry and Uganda)
Wheat review, No. 38, P. 6
- Art (*see also* Eskimos)
Canada at Venice art show, No. 36, P. 5
Gift of Ukrainian art, No. 35, P. 4
Group of Seven's Fiftieth Anniversary,
No. 38, P. 4
Stratford seeks new audiences, No. 39, P. 6
- Asia *see* Industry
- Aviation
Air piracy statement by Mr. Sharp, No. 38, P. 3
- Births *see* Vital Statistics
- Cameroun
Economic and technical pact,
No. 39, P. 5
- Central Mortgage and Housing (CMHC)
see Construction
- Commerce *see* Industry and Trade
- Construction (*see also* Science)
Apartment vacancy rates, No. 36, P. 3
Boost for low-cost housing, No. 35, P. 3
Computers help build roads, No. 39, P. 4
- Cost of Living
Consumer price indexes, No. 37, P. 6
- Deaths *see* Vital Statistics
- Eskimos
Soapstone for Eskimo art, No. 37, P. 5
- Exhibitions (*see also* Art)
Canada's success at Osaka, No. 39, P. 3
- External Affairs
Diplomatic post for Defence Minister,
No. 39, P. 5
Foreign diplomats *see* North, No. 36, P. 3
- External Aid
Fish to Vietnam, No. 37, P. 3
Niger road-building loan, No. 35, P. 4
Pakistan flood relief, No. 35, P. 5
Teaching equipment to Jamaica, No. 36, P. 4
Vaccine to WHO, No. 38, P. 3
- Finance
Money policy developments, No. 38, P. 1
- Forestry (*see also* Science)
Canada's contribution to international forestry,
No. 39, P. 1
Junior forest rangers exchange program,
No. 35, P. 6
- Ghana *see* Visits
- Grants and Awards
Athletic grants, No. 39, P. 6
Canadian scientist honoured, No. 39, P. 6
- Health and Welfare
Community health centres, No. 35, P. 5
Hospital for Northerners, No. 37, P. 4
- Hijacking *see* Aviation
- Housing *see* Construction
- Industry (*see also* Trade)
Investment in Canada, No. 37, P. 3
Potential for development in Asia, No. 36, P. 4
Wild rice, No. 38, P. 3
- Inflation *see* Finance
- International Law
Address by Mr. Sharp to World Association of
World Federalists, No. 36, P. 1
- Israel *see* Transportation
- Italy *see* Art
- Labour
Employment and salaries, No. 35, P. 6
- Marriages *see* Vital Statistics
- Museums
Old German plane to, No. 35, P. 3
- National Defence
Cyprus troop switch, No. 36, P. 3
Military bases to close, No. 37, P. 3
Pay raise for senior staff, No. 38, P. 6
- National Research Council *see* Science
- Natural Resources (*see also* Eskimos and Taxation)
Guidelines for Northern pipelines, No. 35, P. 1
- Northern Affairs *see* External Affairs, Health and
Welfare and Natural Resources
- Pollution
Control of shipping pollution, No. 39, P. 2
Symposium on, No. 36, P. 4
- Post Office
Canadian stamps in 1971, No. 39, P. 5
- Science (*see also* Grants and Awards)
Earthquake conference, No. 39, P. 2
NRC appoints women directors, No. 35, P. 4
Tree pest research, No. 37, P. 5
Wind speed on buildings, No. 37, P. 5
- Sharp, Mitchell *see* Aviation and International Law

